



June 7, 2013

Mr. James Marshall  
Senior Water Resources Control Engineer  
Regional Water Quality Control Board, Central Valley Region  
11020 Sun Center Drive #200  
Rancho Cordova, CA 95670

Re: Comments on Tentative Waste Discharge Requirements for the City of Brentwood  
Wastewater Treatment Plant (NPDES No. CA0085201)

Dear Mr. Marshall:

On behalf of the City of Brentwood (City), enclosed are comments on the Tentative Waste Discharge Requirements and NPDES permit (Tentative Permit) for the City of Brentwood Wastewater Treatment Plant (WWTP). The City is particularly concerned about new Monitoring and Reporting Program requirements regarding:

- chronic whole effluent toxicity testing and associated dilution series for routine and accelerated monitoring
- the requirement to monitor dioxin and furan congeners twice a year for three years
- pretreatment program reporting requirements
- expansion of the groundwater monitoring to include a well not previously monitored

These concerns are detailed in Attachment A.

In the interim, please contact me at (925) 516-6070 or Art O'Brien at (916) 405-8944 if you have any questions regarding these comments.

Sincerely,

Casey Wichert  
Wastewater Operations Manager

Attachment A – Comments on Tentative Permit

Attachment B – May 18, 2011 letter from Central Valley Water Board re. Groundwater Monitoring

cc: Dania Jimmerson, Central Valley Regional Water Quality Control Board  
Art O'Brien, Robertson-Bryan, Inc.

---

**PUBLIC WORKS DEPARTMENT**  
150 City Park Way, Brentwood, CA 94513-1164  
[www.brentwoodca.gov](http://www.brentwoodca.gov)

**Operations Division**  
2201 Elkins Way, Brentwood, CA 94513-7344  
Phone (925) 516-6000—Fax (925) 516-6001

**Solid Waste Operations**  
2300 Elkins Way, Brentwood, CA 94513-7350  
Phone (925) 516-6090—Fax (925) 516-6091

**Wastewater Operations**  
2251 Elkins Way, Brentwood, CA 94513-7344  
Phone (925) 516-6060—Fax (925) 516-6061

## ATTACHMENT A

### CITY OF BRENTWOOD COMMENTS ON TENTATIVE WASTE DISCHARGE REQUIREMENTS FOR THE CITY OF BRENTWOOD WASTEWATER TREATMENT PLANT CONTRA COSTA COUNTY

Submitted June 7, 2012

---

#### **Limitations and Discharge Requirements**

p. 4, B. Facility Description. The following edits are required for accuracy.

In the previous permit and as part of the Facility's treatment train the Discharger utilized unlined ponds, which discharge wastes to groundwater land. The Discharger no longer utilizes the ponds as part of their treatment system. Currently, secondary and tertiary effluent is being diverted to the ponds only in case of an emergency

The same edit regarding "land" is required on p. F-4.

p. 10, S. Provisions and Requirements Implementing State Law. The following edit is required for accuracy.

The provisions/requirements in sections ...VIII.G.B...are included to implement state law only.

p. 26, c. Temperature Study. In the last sentence of the first paragraph in this section, the word "Dischargers" needs to be changed to "Discharger."

p. 27, c. Emergency Storage Pond Operating Requirements. The following edit is required to subsection i of this section. The storage ponds are not part of the treatment process.

- i. The ~~treatment~~ facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

p. 38, I. Chlorpyrifos and Diazinon Effluent Limitations. The cross-reference in this section should be to Section IV.A.1.j, not IV.A.1.k.

#### **Attachment E – Monitoring and Reporting Program (MRP)**

p. E-4, Table E-1. Monitoring Locations. Monitoring well A-2 is incorrectly listed as a well that requires monitoring. A letter to the City from the Central Valley Water Board NPDES Compliance and Enforcement Unit dated May 18, 2011 (attached) specifies wells to be monitored to fulfill current MRP requirements. A-2 is not listed in this letter, therefore, the City

## ATTACHMENT A

has not been monitoring this well. The City requests well A-2 be deleted from the MRP. Well A-2 also needs to be deleted from p. E-14.

p. E-6, Table E-3. Effluent Monitoring. The units for Standard Minerals says “See Attachment I,” however “mg/L” is more appropriate, as not all standard minerals are listed in Attachment I.

p. E-9, 7. Dilutions. Because the WET monitoring trigger is set at  $>1$  TUC (TUC =  $100/\text{NOEC}$ ) any statistically significant effect observed in 100% effluent relative to the test control will result in a TUC of  $>1$ . Therefore, a dilution series is not necessary to determine whether the WET monitoring trigger is exceeded or not. Since the WET monitoring trigger is the same for both routine and accelerated monitoring, the allowance to perform the toxicity tests without a dilution series should be granted for both routine *and* accelerated monitoring. The following revisions grant this dilution series allowance for both routine and accelerated monitoring, and further clarify that a dilution series is required for TRE-related monitoring. Because TRE-related monitoring is driven by a specific observed toxicity event, the revisions further clarify that the dilution series to be used can be the one detailed in Table E-4, or an alternative dilution series detailed in the TRE Action Plan since an alternative dilution series may be more appropriate given the specific circumstances triggering a TRE.

7. Dilutions – For routine and accelerated chronic toxicity monitoring, it is not necessary to perform the test using a dilution series. The chronic toxicity testing shall be performed using the 100% effluent and one control. If toxicity is found in any effluent test, the Discharger must conduct accelerated monitoring in accordance with Section VI.C.2.a of the Limitations and Discharge Requirements ~~using the dilution series identified in Table E-4, below.~~ For TRE monitoring, the chronic toxicity testing shall be performed using the dilution series identified in Table E-4, below, unless an alternative dilution series is detailed in the submitted TRE Action Plan. A receiving water control or laboratory water control may be used as the diluent.

Also note that the dilution series presented in Table E-4 is inconsistent with direction provided in the referencing text. As presented, Table E-4 specifies the dilution series to be prepared with receiving water, which is inconsistent with the allowance providing that “a receiving water control or laboratory water control may be used as the diluent.” Table E-4 could be made consistent with this allowance by incorporating the revisions detailed below.

**Table E-4. Chronic Toxicity Testing Dilution Series**

Sample	Dilutions (%)					Controls	
	100	75	50	25	12.5	Receiving Water	Laboratory Water
% Effluent	100	75	50	25	12.5	0	0
% Dilution Water <sup>a</sup>	0	25	50	75	87.5	100	0

<sup>a</sup> a receiving water control or laboratory water control may be used as the diluent

## ATTACHMENT A

p. E-12, Table E-6. Land Discharge Monitoring Requirements. A new footnote #2 is needed for the dissolved oxygen and pH monitoring requirements that states, "Monitoring for dissolved oxygen and pH is not required when pond water depth is less than 1 foot." Otherwise, the City will not be able to collect representative pond water samples, and will be unnecessarily at risk for notices of violation because it did not report monitoring results when there is no water to sample.

p. E-17, 4. Reporting Protocols. The acronym "ML" needs to be changed to "RL" for "reporting level" throughout this entire section (a total of three replacements needed). ML is used more appropriately later in the MRP as the acronym for "minimum level."

p. E-18, 7.a. Annual Average Limitations. There are no annual average effluent limitations in the Tentative Permit, therefore, this section should be deleted. At a minimum, the following edit is required, because the Tentative Permit does not contain annual average limitations for the listed constituents.

**a. Annual Average Limitations.** For constituents with effluent limitations specified as "annual average" (~~aluminum, electrical conductivity, iron, and manganese~~) the Discharger shall report the annual average in the January...

p. E-20, Table E-11. The following edit is needed in this table.

Pollution Prevention Plan for Mercury and Compliance Schedule for Methylmercury, Progress Reports (Special Provisions VI.C.3.a. and VI.C.7.b)

p. E-21, item #3. The following edit is needed for consistency with the same terminology used elsewhere in the Tentative Permit. The City is being required to identify the laboratory reporting levels that will be achieved (see shaded text below), which is consistent with terminology used earlier in the MRP on p. E-17.

3. Within 60 days of permit adoption, the Discharger shall submit a report outlining ~~minimum reporting levels~~, method detection limits, and analytical methods for approval, with a goal to achieve detection levels below applicable water quality criteria. At a minimum, the Discharger shall comply with the monitoring requirements for CTR constituents as outlined in section 2.3 and 2.4 of the SIP. The maximum required reporting levels for priority pollutant constituents shall be based on the Minimum Levels (MLs) contained in Appendix 4 of the SIP, determined in accordance with Section 2.4.2 and Section 2.4.3 of the SIP.

p. E-21, 4. Effluent and Receiving Water Characterization Study. Item "iv" needs to be renumbered to be "iii" and footnote number 1 of item "ii" needs to be deleted, because there is no footnote 1 text.

p. E-21, 5. Dioxin and Furan Effluent Water Characterization Study. First the word "presence" needs to be changed to "presence," and the third item in the task list should be numbered "iii" not "ii." Further, this study provision, which requires the City to monitor for dioxin and furan congeners for three years is an excessive and unnecessary requirement. The City requests this study provision be removed. The Contra Costa Water District has a waiver from the California Department of Public Health for testing of these constituents in drinking

## ATTACHMENT A

water and has suggested to the City to apply for a similar waiver for the City's drinking water. These constituents have not been used in the watershed and have not been detected in the City's drinking water supply wells.

This comment also applies to item #5 on p. F-80 and p. J-1.

p. E-22, 7. Annual Pretreatment Reporting Requirements. This entire section applies to reporting on significant industrial users (SIUs). There are no SIUs in the Brentwood WWTP service area. Therefore, the City asks that the following clarifying text be added, so that the City will not be deemed out of compliance for not reporting on SIUs that do not currently exist.

**7. Annual Pretreatment Reporting Requirements.** The Discharger shall submit annually a report to the Central Valley Water Board, with copies to USEPA Region 9 and the State Water Board, describing the Discharger's pretreatment activities over the previous 12 months, when there are significant industrial users (SIUs) in the Discharger's service area discharging to the POTW.

Further, the City is concerned about new pretreatment reporting requirements for influent and effluent monitoring described in subsection a (shading added for emphasis):

a. A summary of analytical results from representative, flow proportioned, 24-hour composite sampling of the POTW's influent and effluent for those pollutants USEPA has identified under section 307(a) of the CWA which are known or suspected to be discharged by industrial users. This will consist of an annual full priority pollutant scan. The Discharger is not required to sample and analyze for asbestos. The Discharger shall submit the results of the annual priority pollutant scan electronically to the Central Valley Water Board using the State Water Board's CIWQS Program Website.

The first sentence of this subsection is consistent with the current NPDES permit and only requires the City to conduct annual influent and effluent monitoring for pollutants known or suspected to be discharged by industrial users. The shaded text above is a new requirement relative to the current NPDES permit and requires the City to monitor for all priority pollutants, with no exclusion of pollutants if they are not discharged by industrial users. This is a significant increased monitoring burden to the City. There are currently no industrial users in the WWTP service area; despite this fact, as written, the City will be required to monitor influent and effluent priority pollutants annually. Further, the Tentative Permit already requires priority pollutant monitoring of the effluent quarterly during the 3<sup>rd</sup> or 4<sup>th</sup> year of the permit term. This new pretreatment program monitoring requirement expands this requirement. The City requests that the shaded text be deleted from the Tentative Permit. Note: the City does not object to electronic submittal of data to CIWQS.

Further, there are conflicting deadlines for submittal of quarterly reports described in subsection f. The City recommends the following changes to this subsection to reconcile the conflicting deadlines. Also, there are no SIUs in the WWTP service area that are discharging to the WWTP. The City should not be required to submit quarterly reports until there are SIUs in the service area. Therefore, the City asks that the following clarifying text be added, so that the City will not be deemed out of compliance for not reporting on SIUs that do not currently exist.

## ATTACHMENT A

f. A report describing the compliance status of each SIU characterized by the descriptions in items iii through vii above shall be submitted for each calendar quarter ~~by the first day of the second month following the end of the quarter~~. The report shall identify the specific compliance status of each such SIU and shall also identify the compliance status of the POTW with regards to audit/pretreatment compliance inspection requirements. If none of the aforementioned conditions exist, at a minimum, a letter indicating that all industries are in compliance and no violations or changes to the pretreatment program have occurred during the quarter must be submitted. The first, second, and third quarter reports are due by the first day of the second month following the end of the quarter. The information required in the fourth quarter report shall be included as part of the annual report due every 28 February. This quarterly reporting requirement shall commence ~~upon issuance of this Order~~ when there are significant industrial users (SIUs) in the Discharger's service area discharging to the POTW.

### Attachment F – Fact Sheet

p. F-1 and F-4. Include comments discussed in section above: Limitations and Discharge Requirements

p. F-4. Table F-1. Change “Mailing Address” to: “Same as facility address”

p. F-4, II. Facility Description. The following edit is required in the last sentence of this section.

Pond 7 was disconnected from the system on 31 May 2012 and is ~~currently be used as a~~ the current location for the City's new solid waste transfer station.

p. F-5, Table F-2. Aluminum. The current average monthly effluent limitation for aluminum is 76.5 µg/L, not 23 µg/L. The current maximum daily effluent limitation is 126 µg/L, not 240 µg/L. These limitation values need to be shown correctly in Table F-2.

p. F-17, b. Flow. The following edit is needed for accuracy.

**b. Flow.** The Facility was designed to provide a tertiary level of treatment for ~~up to~~ a design average dry weather flow of 5.0 mgd. Therefore, this Order contains an average dry weather discharge flow effluent limit of 5.0 mgd.

p. F-23, first paragraph. In this first paragraph, “Table F-5” needs to be replaced with “Table F-5a.”

p. F-23, Table 5a. Zinc ECA Evaluation. The “Highest Assumed Upstream Receiving Water Zinc Concentration” is incorrect. This parameter is supposed to be equal to the zinc criterion at the lowest observed receiving water hardness. At the lowest observed receiving water hardness of 157 mg/L (as CaCO<sub>3</sub>), the zinc criterion is 176 µg/L (or 180 µg/L if rounding to two significant figures), not 20 µg/L. Further, the fully-mixed downstream ambient concentration values are not consistent with the zinc ECA. The zinc ECA has been rounded to two significant figures. However, the fully-mixed concentrations presented in the table are four significant figures. For example, the 100% effluent fraction in the table is shown as 205.5 µg/L, not the zinc ECA of 210 µg/L, giving the appearance of a mathematical inconsistency. The City

## ATTACHMENT A

recommends revising either the ECA or the fully mixed concentration values to show the same number of significant figures.

p. F-38, first paragraph. The following edit is needed in the last sentence of this paragraph.

Removal of the effluent limitations is consistent with federal antibacksliding regulations (see section IV.D.3 of the Fact Sheet).

p. F-48, (b) RPA Results for Pathogens. The first paragraph in this subsection regarding pH that begins “Raw domestic wastewater inherently has variable pH...” needs to be deleted, as this subsection is discussing pathogens.

p. F-69, Table F-15. Summary of Final Effluent Limitations. The maximum daily effluent limitation for copper needs to be changed from 23 µg/L to 10.4 µg/L.

p. F-76, B. Effluent Monitoring, item #2. This paragraph states that standard mineral monitoring frequency has been retained from the current NPDES permit. This is incorrect. The current NPDES permit requires monitoring once per year, and the Tentative Permit is requiring monitoring quarterly during the 3<sup>rd</sup> or 4<sup>th</sup> year of the permit term. Therefore, standard minerals should be deleted from item #2. If it is necessary to explain the change in monitoring frequency, then a new paragraph should be added to this section.

p. F-76, B. Effluent Monitoring, item #3. This paragraph states that the effluent monitoring frequency for nitrite was reduced from the current NPDES permit. The current permit does not require effluent monitoring for nitrite, thus, nitrite should be deleted from this paragraph. If it is necessary to explain the new monitoring requirement, then a new paragraph should be added to this section.

p. F-76, B. Effluent Monitoring, item #5. This paragraph states that effluent monitoring for settleable solids has been removed because concentrations have been consistently below limits. There are no effluent limitations in the current NPDES permit and none proposed in the Tentative Permit. Thus, this statement is incorrect. The City offers the following suggested revisions to this paragraph.

Monthly effluent monitoring for Settleable Solids has been removed because ~~the data collected between March 2008 and February 2012 is consistently below the required limits~~ there are no effluent limitations for Settleable Solids. Additionally, the tertiary treatment process provides a consistent and high level of treatment with respect to Settleable Solids. Furthermore, automated monitoring of similar parameters (e.g., turbidity) is designed to control treatment processes and detect potential release of inadequately treated or disinfected effluent ~~provides information to~~ support the Discharger's operations and protection of receiving water quality.

p. F-77, item #6. The word “gama” needs to be replaced with “gamma” in this section.

p. F-89, a. Title 22 or Equivalent, Disinfection Requirements. A space is needed between “safety,” and “wastewater.”

## ATTACHMENT A

### **Attachment G – Summary of Reasonable Potential Analysis**

p. G-1, Attachment G. The title for the Attachment G table ends with a footnote #1, but there is no footnote. Therefore, the “#1” at the end of the title should be deleted.



Linda S. Adams  
Acting Secretary for  
Environmental  
Protection

# California Regional Water Quality Control Board Central Valley Region

Katherine Hart, Chair

11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114  
Phone (916) 464-3291 • FAX (916) 464-4645  
<http://www.waterboards.ca.gov/centralvalley>



Edmund G. Brown Jr.  
Governor

18 May 2011

Casey Wichert  
Wastewater Treatment Plant Supervisor  
City of Brentwood  
2251 Elkins Way  
Brentwood, CA 94513

## **SELF-MONITORING REPORT REVIEW AND RESPONSE TO GROUNDWATER MONITORING REPORT RECOMMENDATIONS, CITY OF BRENTWOOD, WASTEWATER TREATMENT PLANT, CONTRA COSTA COUNTY**

The discharge of wastewater by the City of Brentwood (Discharger) from its Wastewater Treatment Plant is regulated by Waste Discharge Requirements (WDRs) Order R5-2008-0006 (NPDES CA0082660) and Cease and Desist Order (CDO) R5-2008-0007. The Monitoring and Reporting Program (MRP) of the WDRs requires monitoring for constituents and other parameters and specifies the location and frequency of monitoring. Central Valley Water Board staff has reviewed the self-monitoring reports (SMRs) submitted by the Discharger for the **March 2011** and **First Quarter 2011** monitoring periods.

The Discharger has completed the eSMR<sup>2</sup> implementation process for the submittal of electronic reports through the State Water Board's CIWQS eSMR module. The Discharger now only submits electronic reports for its MRP annual, quarterly, and monthly SMR requirements. The electronic report is the legal document which staff reviews for completeness and compliance with the WDRs.

The review of the SMRs was found complete and no violations were identified. Central Valley Water Board has the following comments from review of the SMRs.

### **Comments regarding the SMR**

1. According to the March 2011 SMR, effluent was diverted to Pond 8 due to total residual chlorine spikes on 4, 13, 26, and 29 March 2011. The effluent was disposed of by percolation, as allowed by Order R5-2008-0006. Because there was no discharge to surface water, there was no violation and MMPs do not apply.
2. Effluent priority pollutants are required to be sampled quarterly during the third year following the date of permit adoption. Since the permit was adopted part way through the first quarter of 2008, please begin quarterly effluent priority pollutant monitoring with the second quarter of 2011. See footnote 10 on Table E-3 of the MRP for monitoring requirements.

**California Environmental Protection Agency**

Please address or implement the above comment related to effluent priority pollutant monitoring for the **Second Quarter 2011 SMR**.

### **Response to First Quarter 2011 Groundwater Monitoring Report Recommendations**

Central Valley Water Board staff has reviewed the First Quarter 2011 Groundwater Monitoring Report submitted electronically by the Discharger with the First Quarter SMR. The report states that recommendations will be made in the final Groundwater Quality Characterization Report regarding groundwater monitoring at the facility including locations, frequency, and the constituents monitored. Central Valley Water Boards staff acknowledges that the groundwater monitoring section of the MRP does not define all of the groundwater monitoring locations that are required to be monitored, either quarterly or annually, to comply with MRP requirements. Therefore, Central Valley Water Board staff has the following clarifications to define the groundwater monitoring requirements of the MRP:

- Groundwater monitoring frequency and constituents are already defined in the MRP. Please monitor for the constituents at the frequency listed in Table E-8 of the MRP.
- Based on the First Quarter 2011 Groundwater Monitoring Report, and to continue the data set already established, Central Valley Water Board staff recommends using background monitor wells BG-1, BG-2, and BG-3 and compliance monitoring wells 1-in, 2-in, and EB-5 to fulfill current MRP requirements.
- Central Valley Water Board staff accepts the monitoring that has previously been conducted and reported quarterly for the Groundwater Quality Characterization Report as fulfilling MRP groundwater monitoring requirements. If the groundwater characterization monitoring has been completed, please ensure that monitoring consistent with Table E-8 of the MRP is conducted and reported for the second quarter 2011.
- Quarterly groundwater monitoring results should be uploaded to the quarterly SMR as was done in the First Quarter 2011; however, please ensure that the final Groundwater Quality Characterization Report is also submitted as a paper report.

If you have any questions, please contact Mike Fischer at (916) 464-4663 or [mfischer@waterboards.ca.gov](mailto:mfischer@waterboards.ca.gov).

*Wendy Myers*  
for VICTOR VASQUEZ

Senior Water Resources Control Engineer  
NPDES Compliance and Enforcement Unit